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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,657	11/09/2001	Jeffrey Oliver	100.339US01	7351
34206	7590	01/24/2006	EXAMINER	
FOGG AND ASSOCIATES, LLC P.O. BOX 581339 MINNEAPOLIS, MN 55458-1339			ROBERTS, BRIAN S	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/008,657	<b>Applicant(s)</b> OLIVER ET AL.	
	<b>Examiner</b> Brian Roberts	<b>Art Unit</b> 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

- Claims 1-24 have been examined.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-12 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Inoue (US 6252858).

- In reference to claims 1, 10, 16, and 21

Ganesan et al. teaches in Figure 15

- An Input/Output port manager (IOPM 612) connected to the IO Cards (614) that indicates when T1 line failures occur by frequently polling the IO Cards (614) (column 15 lines 66-67)
- The IOPM (612) maintains and reports to the Operation Maintenance Center the status of the I/O ports (OMC 70) (column 16 lines 1-2)
- The IOPM (612) also monitors T1 I/O ports for alarm conditions and reports events to the OMC (70). The IOPM (612) may perform switchover for backup T1 cards in response to alarm conditions (column 16 lines 2-6)

Ganesan et al. does not explicitly a system information database adapted to refresh based on collected performance information and generate system status information.

Inoue teaches the concept of a network configuration database that frequently refreshes to keep up-to-date information. (column 1 lines 29-43) The database collects information about network elements and generates system status information. (column 4 lines 5-9) Furthermore, Inoue teaches a data retrieval and rearrangement unit (21) that generates fault information and offers necessary and sufficient information for troubleshooting activities. (column 13 line 63 – column 14 line 8)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the IOPM to include a system information database adapted to refresh based on collected performance data and generate system status information because it would allow the IOPM to monitor and periodically record status information and alarm conditions of the T1 I/O ports in a database and generate fault information that is reported the OMC to aid in troubleshooting.

- In reference to claims 2, 12, and 20

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches monitoring for failures and alarm conditions. (column 16 lines 2-4)

- In reference to claims 3, 11, 19, and 23

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The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the IOPM (612) performing switchover for backup T1 cards in response to alarm conditions or an operator request. (column 16 lines 4-6)

- In reference to claim 4

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the IOPM (612) monitoring the T1 I/O ports for alarm conditions and reporting the events to the OMC (70) (remote unit) (column 16 lines 1-4)

- In reference to claims 6-8,14-15,17-18, and 22

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches hardware components comprising T1 cards. (column 15 lines 66-67)

The combination of Ganesan et al. and Inoue does not teach E1 cards or the T1 cards including a driver.

Official Notice is taken that an E1 card is the European equivalent to a T1 card and that each card contains a driver.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of the combination of Ganesan et al. and Inoue to include E1 cards or the T1 cards containing drivers because it would allow the system

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to be deployed in Europe and conform to the European communication standards and allow the T1 cards to have the necessary software to function.

- In reference to claim 9

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim. In Figure 15, Ganesan et al. further teaches an interface between the IOPM (612) and T1 cards.

3. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Inoue (US 6252858), as applied to the parent claims, and further in view of Chang et al. (US 6167279)

- In reference to claims 5 and 13

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim.

The combination of Ganesan et al. and Inoue does not teach an embedded operations channel.

In Figure 1, Chang et al. teaches an embedded operations channel between a radio port (3) and radio port controller unit (4). (column 4 lines 8-11)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of the combination of Ganesan et al. and Inoue to include a embedded operations channel as taught by Chang et al. because the

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embedded operations channel provides a specific administration and maintenance channel to transmit system status information and alarm conditions.

4. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Inoue (US 6252858), as applied to the parent claims, and further in view of Major et al. (US 5455932).

- In reference to claim 24

The combination of Ganesan et al. and Inoue teaches a system that covers substantially all limitations of the parent claim.

The combination of Ganesan et al. and Inoue does not explicitly teach a message queue to receive alarm change messages.

Major et al. teaches a message queue to receive messages in a fault-tolerant data processing system. (abstract)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the IOPM (612) of the combination of Ganesan et al. and Inoue to include a message queue as taught by Major et al. because it allows the IOPM to receive the messages sequentially regardless of the timing of the sent messages.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 10, 16 and 21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are:

- Regan et al. (US 6578086) teaches a database for dynamically managing the topology of a data network.
- Scrandis et al. (US 6816461) teaches a method of controlling network a network element to aggregate alarms and faults of a communication network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

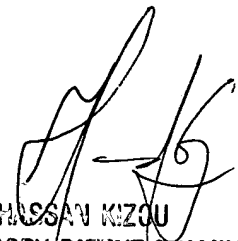
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